

LAMINAR AIR FLOW-HORIZONTAL

Introduction

The Horizontal Laminar Air Flow Unit is designed to provide an ISO Class 5 clean air environment using HEPA filtered horizontal airflow. Clean air flows from rear to front ensuring maximum product protection for pharmaceutical and laboratory applications.



Application

- Pharmaceutical laboratories
- Sterile sampling & compounding
- Microbiology & biotechnology labs
- Electronics & precision assembly
- Quality control laboratories

Parameter Specification

Construction	Powder-coated MS / SS body
Noise Level	≤ 65 dB
Illumination	≥ 800 Lux
Power Supply	230 V $\pm 10\%$, 50 Hz
Blower	Dynamically balanced centrifugal blower

Key Features

- ISO Class 5 (Class 100) clean air environment
- Energy-efficient DC ECM blower
- Continuous Pressure Monitoring upstream for filter testing
- Highly Tested for HVAC Parameter.
- Horizontal unidirectional airflow (Rear to Front)
- HEPA filter efficiency $\geq 99.97\%$ at 0.3 microns
- Uniform airflow velocity $0.45 \pm 20\%$ m/s
- Low noise and vibration design
- Energy efficient blower system
- Smooth and easy-to-clean internal surface
- Ergonomic and operator friendly design
- EU7-Intermediate filter, EU14-Hepa filter
- Optional: UV Reader, LAF Speed Control, Operated by controller, blower trip alarm, Inter locking for door

Construction

- Main Body: Powder coated MS / SS 304/ SS 316 optional
- Work Surface: SS 304/ SS 316 with matte finish
- Side Panels: Clear acrylic glass
- Corrosion resistant epoxy coating

Electrical Specifications

- Power Supply: 230V $\pm 10\%$, 50 Hz, Single Phase
- LED Light
- Continuous duty dynamically balanced blower motor

Model	Working Area (W x D x H)	HEPA Filter Area	Blower Capacity (CFM)
HIAF-24	2x2x3	610 X 1030 X 69	250 CFM
HIAF-36	2x2x3	610 X 1030 X 69	400 CFM
HIAF-48	2x2x3	610 X 1030 X 69	600 CFM
HIAF-60	2x2x3	610 X 1030 X 69	1000 CFM

Standards Compliance

- Designed as per ISO 14644-1
- Suitable for GMP / GLP laboratories
- Cabinet Performance: IEST-RP-CC002.2, Worldwide
- Air Quality: ISO 14644.1, Class 3, Worldwide AS 1386 Class 1.5, Australia JIS B9920, Class 3, Japan
- Filtration: EN-1822 (H14), Europe IEST-RP-CC001.3, Worldwide IEST-RP-CC007, Worldwide IEST-RP-CC034.1, Worldwide
- Electrical Safety: IEC61010-1, Worldwide EN 61010-1, Europe UL61010-1, USA CAN/CSA-22.2, No.61010-1